

REMARKS

In the Office Action, the Examiner noted that claims 1-16 were pending in the application. The Examiner objected to claims 12-14 and rejected the remaining claims. By this Amendment, various claims have been amended. Thus, claims 1-16 remain pending in the application. The Examiner's rejections are traversed below.

THE TITLE

The Title of the invention has been amended in accordance with the Examiner's requirement in item 1 on page 2 of the Office Action.

CLAIM OBJECTION

Applicants are unable to locate a misspelling in claim 5.

REJECTION UNDER 35 U.S.C. § 101

In item 4 on pages 2 and 3 of the Office Action, the Examiner rejected claims 1-7 under 35 U.S.C. § 101. Claim 1 has been amended to recite a "computer-readable medium" as suggested by the Examiner. Note that claim 8 has also been amended, so that claims 1 and 8 are not identical.

It is submitted that all claims meet the requirements of 35 U.S.C. § 101.

REJECTION UNDER 35 U.S.C. § 102(b)

In item 5 on pages 3-5 of the Office Action, the Examiner rejected claims 1-4, 8-11, 15 and 16 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent 5, 748,802 to Winkelman. The Winkelman reference is directed to a method and apparatus for the analysis and correction of the image gradation in image originals.

CLAIMS 1-4, 8-11, 15 AND 16 PATENTABLY DISTINGUISH OVER THE PRIOR ART

Independent claims 1, 8, 15 and 16 have been amended to include a feature of normalizing a feature quantity of an image through conducting a range transformation which

allows the feature quantity of the image to be distributed over a whole range. This feature is described, for example, with respect to Figure 2 and in the fifth full paragraph on page 11 of the specification, as well as the third full paragraph on page 6 of the specification.

The present claimed invention seeks to overcome the problem in the prior art wherein the feature quantity of the image to be processed may not be distributed over the whole range. For example, because of an inappropriate white balance, the distribution of the feature quantity of the image might possibly be biased. Therefore, if a mean value and a standard deviation of the feature quantity of the image are extracted from an image which is inappropriately balanced, a biased mean value and a biased standard deviation might occur. Therefore, accurate judgment of the image condition, such as the brightness of the image, cannot be achieved in this circumstance.

The present invention overcomes this problem and allows an accurate judgment of the image condition by providing the feature of normalizing the feature quantity of the image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range. This is done prior to extracting the mean value and the standard deviation of the feature quantity of the image.

In contrast to the present invention, the Winkelman reference does not teach or suggest the necessity of performing a range transformation which is conducted so that the feature quantity of the image to be processed is distributed over the whole range. Further, because Winkelman fails to perform normalization of the feature quantity of the image, an accurate image condition may not be judged.

Referring to claim 1, it is submitted that the prior art does not teach or suggest the claimed image processing program which includes:

a normalizing function normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

Claims 2-7 depend, directly or indirectly, on claim 1 and include all the features of that claim plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claims 2-7 patentably distinguish over the prior art.

Claim 8 is directed to a computer-readable recording medium recorded with an image processing program for realizing on a computer:

normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

Therefore, it is submitted that claim 8 patentably distinguishes over the prior art.

Claim 9-14 depend, directly or indirectly, from claim 8 and include all the features of that claim plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claims 9-14 patentably distinguish over the prior art.

Claim 15 is directed to an image processing method which includes:

normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

Therefore, it is submitted that claim 15 patentably distinguishes over the prior art.

Claim 16 is directed to an image processing apparatus which includes:

normalizing means for normalizing a feature quantity of an image through conducting a range transformation which allows the feature quantity of the image to be distributed over a whole range;

Therefore, it is submitted that claim 16 patentably distinguishes over the prior art.

ALLOWABLE SUBJECT MATTER

In item 6 on page 5 of the Office Action, the Examiner indicated that claims 12-14 contain allowable subject matter. It is submitted that claims 5-7 also contain corresponding allowable subject matter. However, it is also submitted, as explained above, that claims 5-7 and 12-14 depend from independent claims (claims 1 and 8) which are patentable over the prior art. Therefore, it is submitted that these claims are also patentable over the prior art.

SUMMARY

It is submitted that none of the references, either taken alone or in combination, teach the present claimed invention. Thus, claims 1-16 are deemed to be in a condition suitable for allowance. Reconsideration of the claims and an early notice of allowance are earnestly submitted.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

10-3-05

By:


John C. Garvey
Registration No. 28,607

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501